

What we claim as our invention is:

1        1. A multimeter, comprising:

2        an input circuit for receiving voltage signals;

3        a measurement circuit coupled to the output of said input circuit for processing  
4        said voltage signals to provide measurement results;

5        a display device having a viewing screen for displaying said measurement results;

6        and

7        a low-pass filter selectably disposed between said input circuit and said  
8        measurement circuit.

1        2. A multimeter in accordance with claim 1 where in said low-pass filter is  
2        selectably disposed between said input circuit and said measurement circuit when a  
3        single key is pressed.

1        3. A multimeter in accordance with claim 2 wherein a low-pass filter mode  
2        indicator is provided when said single key is pressed.

1        4. A multimeter in accordance with claim 3 wherein said low-pass filter mode  
2        indicator is an icon that appears on said viewing screen.

1        5. A multimeter in accordance with claim 1 further comprising an RMS converter  
2        circuit that is selectably interposed between the output of said low-pass filter and said  
3        measurement circuit.

1        6.. A multimeter having a filtered measurement mode, comprising:

2        an input circuit for receiving a voltage input signal and providing a conditioned  
3        signal;

4        a low-pass filter adapted to receive said conditioned signal and provide a filtered  
5        signal;

6 a first switch for receiving both said conditioned signal and said filtered signal and  
7 providing a selected output;

8 an RMS converter for receiving said selected output and providing an RMS value  
9 in response thereto;

10 a second switch for receiving both said RMS value and said filtered signal and  
11 selecting one of said RMS value and said filtered value as a measurement signal;

12 a measurement circuit for receiving said measurement signal and generating  
13 measurement results, and

14 a user interface including a filter selection key and a display device for displaying  
15 said measurements results,

16 wherein said filtered signal is selected by said first switch in response to operation  
17 of said filter selection key.

1 7. A multimeter in accordance with claim 6 further comprising a low-pass filter  
2 mode indicator that is provided when said filter selection key is pressed.

1 8. A multimeter in accordance with claim 6 wherein said low-pass filter mode  
2 indicator is an icon that is displayed by said display device.